

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-16 remain in the application. Claims 1 and 9 have been amended. Claims 9-16 have been withdrawn.

In deference to the Examiner's requirement in the section "Election/Restriction" on pages 2-3 of the Office action, Applicants affirm the election of claims 1-8, drawn to a fuel cell installation.

In the section "Claim Rejections - 35 USC § 102" on pages 3-4 of the above-mentioned Office action, claim 1 has been rejected as being anticipated by Einhart et al. (US 6,531,876 B1) under 35 U.S.C. § 102(e).

In the section "Claim Rejections - 35 USC § 102" on page 4 of the above-mentioned Office action, claims 1-4 have been rejected as being anticipated by Barton (US 6,724,194 B1) under 35 U.S.C. § 102(e).

In the section "Claim Rejections - 35 USC § 103" on page 5 of the above-mentioned Office action, claim 2 has been rejected as being unpatentable over Einhart et al. under 35 U.S.C. § 103(a).

In the section "Claim Rejections - 35 USC § 103" on pages 5-6 of the above-mentioned Office action, claim 5 has been rejected as being unpatentable over Barton in view of Tillmetz et al. (US 6,410,175 B1) under 35 U.S.C. § 103(a).

In the section "Claim Rejections - 35 USC § 103" on pages 6-7 of the above-mentioned Office action, claims 4-5 have been rejected as being unpatentable over Einhart et al. in view of Tillmetz et al. under 35 U.S.C. § 103(a).

In the section "Claim Rejections - 35 USC § 103" on pages 7-8 of the above-mentioned Office action, claim 6 has been rejected as being unpatentable over Einhart et al. in view of Wittel (US 4,583,583) under 35 U.S.C. § 103(a).

In the section "Claim Rejections - 35 USC § 103" on pages 9-10 of the above-mentioned Office action, claim 6 has been rejected as being unpatentable over Barton in view of Wittel under 35 U.S.C. § 103(a).

In the section "Claim Rejections - 35 USC § 103" on pages 10-11 of the above-mentioned Office action, claims 7-8 have been rejected as being unpatentable over Barton in view of Fekete (US 4,962,462) under 35 U.S.C. § 103(a).

In the section "Claim Rejections - 35 USC § 103" on pages 11-12 of the above-mentioned Office action, claims 7-8 have been rejected as being unpatentable over Einhart et al. in view of Fekete under 35 U.S.C. § 103(a).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references. However, the language of claim 1 has been modified in an effort to even more clearly define the invention of the instant application.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

 said individual fuel cell units being electrically connected in series and being configured as separate subsystems; and

 at least two of said separate subsystems having different functional characteristics and having at least one of separate voltage controls and separate power electronics for matching at least one of voltage and power to different demand situations.

Initially, Applicants would like to briefly discuss each of the five cited references as follows:

1. Einhart et al. relate to an apparatus for measuring the voltage of a plurality of voltage sources mounted in a stack. Although the voltage sources could theoretically be fuel cells, that is not specified anywhere in Einhart et al. Therefore, Applicants do not understand the relevance of this reference.
2. Barton relates to a voltage monitor for a fuel cell with different acceptance elements for the single cell of the stack and corresponding signal processing. Therefore, this reference is not relevant.

In addition, it is noted that Barton has an effective date of **June 30, 2000**, which is later than the priority dates **July 5, 1999** and **December 23, 1999** of the instant application. Therefore, Barton is not available as a prior art reference for the invention of the instant application.

3. Tillmetz et al. describe a fuel cell system 31 with improved starting capability, which has two individual fuel cell stacks 31 and 32. Tillmetz et al. basically disclose that the two fuel cell stacks work according to the same principle and especially contain PEM fuel cells.

It seems that the fuel cell stack 31 is smaller than the fuel cell stack 32. However, the two fuel cell stacks have, on one hand, a common control and, on the other hand, resource supply, thereby it is only at the start that the smaller fuel cell stack is applied and then the larger fuel cell stack takes over the task.

4. Wittel describes a fuel cell stack with resistant cooling devices and internal coils. As can be seen from the figures of Wittel, this reference relates to a single stack of identical fuel cells (for example, in Fig. 1 the stack is divided into four parts, each having lines connected to the coolant). The resource supply is the same for all stack parts and there are also no separate control units.
5. Fekete shows a single fuel cell stack, which is recharged alternatively with two conventional batteries. A common control device is provided.

In contrast to the cited references, the subject matter of the invention of the instant application is a fuel cell installation, which has at least two subsystems operatable independently from one another. This means that the two fuel cell systems are structurally and functionally different. For

example, a normal PEM fuel cell can be coupled with a high temperature (HT) / PEM fuel cell.

It is important for the invention of the instant application that each of the fuel cell systems has its own control and its own resource supply. This only makes sense for the concept of separate subsystems, in which, for example, the high voltage fuel cells are used as energy sources for the drive of an automobile while the low voltage fuel cells are used as so-called auxiliary power unit (APU). This is clearly different from the cited references.

The Examiner has ignored the principle of the invention of the instant application, according to which the subsystems work according to different principles and thus have separate resources and control device.

Tillmetz et al. have two resource tanks, namely a first tank 36 for the starting fuel cell and a second tank 34 for the operating fuel cell. However, the two resource tanks are connected with each other and especially have a common control.

With regard to claims 7 and 8, although it is correct that Fekete discloses that batteries are used as secondary energy

sources, the concept of the invention of the instant application to apply two separate fuel cell units, which work differently, is not derivable from Fekete.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-8 are solicited. Rejoinder of method claims 9-16 is requested upon allowance of product claims 1-8 under MPEP 821.04 ("if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined").

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which

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might be due with respect to 37 CFR Sections 1.16 and 1.17 to
the Deposit Account of Lerner and Greenberg, P.A., No. 12-
1099.

Respectfully submitted,

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